

MRI Workgroup Meeting Notes 11/18/2021
Meeting held via Zoom.

Chairperson is Suresh Mukherji, MD

Attendance:

- Chairperson is Suresh Mukherji, MD
- Abby Burnell, RWC Advocacy
- Karen Thompson, DMC Director of Imaging at Sinai-Grace
- Steve Szelag, U of M
- David Walker, Spectrum
- Tulika Bhattacharya, MDHHS
- Scott Bowers, Trinity (Manager of MRI Services for SE MI)
- Brenda Rogers, MDHHS
- Marcus Connelly, MDHHS
- Brian Madison, HCS Group
- Cheryl Martin, HFHS (VP of Radiology)
- Dr. Brad Betz, Spectrum
- Jenny Groseclose, Munson
- Rachel Kelley, Ascension
- Lou Bischoff, Imaging Director for Ascension Providence
- Chris Struve, Ascension
- Marlana Hendershot, Sparrow
- Kirsten Tesner, Ascension
- Arlene Elliot, Arbor Advisors
- Matt Rowell, Alliance HNI
- Rod Z, MidMichigan Health
- Nancy List, McLaren Healthcare
- Eric Fischer, DMC
- Ryan Mysen, Alliance HNI
- Kenny Wirth, MDHHS
- Emily Vocke, HFHS
- Daniel Conklin
- Unidentified, Zoom User "Umbrin"
- Vikas Gulani, Michigan Medicine
- Stacey Leick, EAM
- Ron Meade, Beaumont Hospital
- Patrick O'Donovan, Beaumont Health
- Don Dumke, Dickinson County Healthcare System
- Unidentified, Phone User 616-***-3668
- New Participants:
- None.

Welcome and call to order: Dr. Mukherji

Review and Level set: Dr. Mukherji

- 3 meetings left on the schedule. We started with a total of 11 charges.
- To date we have tracked the following:
 - Charge 3 is resolved at the last meeting and proposed language was approved.
 - Charge 6 was discussed at the last meeting and although it was within our scope but we have agreed not to take it up at this time because it was too broad.
 - Charges 5, 7, 8 out of scope and closed out at the first meeting.
 - Charge 11 is just clean up edits the Department will make if needed.
 - 5/11 charges have been closed to date. Today we will hear subgroup updates from the remaining charges.
 - Charges 1,4,9 (Subgroup 1)
 - Charge 2 (Subgroup 3)
 - Charge 10 (Subgroup 4)

Subgroup Updates

Subgroup #1 (Charges 1, 4, & 9) –Presentation and survey responses.

- Lead by Marlena Hendershot, Sparrow and Cheryl Martin, HFHS
- The subgroup has flipped the order in the way they will have address the charges. Looked at charge 4 first they charges 1 and 9.

Charge 4 – GA Weighting

- The subgroup completed a time study and interview on the anesthesia issue.
- There was consensus from the subgroup on the item to update the sedation weightings and add an additional weight from of 1.5 for deep sedation and general anesthesia.
- The subgroup will model the increased adjusted procedures (Aps) to account for the increased sedation, will mostly impact hospitals.
- Language below approved unanimously by the workgroup without any concerns.

Section 1. Definitions

Sec. 2(1)

(pp) "Re-sedated patient" means a patient, either pediatric or adult, who fails the initial sedation during the scan time and must be extracted from the unit to rescue the patient with additional sedation.

(qq) "Sedated patient" means a patient that meets all of the following: (i) whose level of consciousness is either conscious-sedation or a higher level of sedation, as defined by the American Association of Anesthesiologists, the American Academy of Pediatrics, the Joint Commission on the Accreditation of Health Care Organizations, or an equivalent definition. (ii) who is monitored by mechanical devices while in the magnet.

Section 15. MRI Procedure Adjustments

Sec. 15(1)

(d)For each MRI procedure performed on a sedated patient, 0.75 shall be added to the base value **for conscious sedation and 1.5 shall be added to the base value for general anesthesia or deep sedation as defined by the American Society of Anesthesiologists**

(e) For each MRI procedure performed on a re-sedated patient, 0.25 shall be added to the base

Charge 1 – Review volume requirements

- The subgroup will focus on minimum maintenance volumes for fixed and mobile and expansion volumes.
- The subgroup is modeling sedation and looking to have recommendations at the next workgroup meeting.
- The group is considering language or geographically significant units specifically in rural and underserved areas of the state.

Charge 9- Add a host site to a fixed service without physician commitments

- Draft language has been formed and will be approved at the next meeting. Hoping to bring recommendations to the next workgroup meeting.

Subgroup # 3 (Charge 2) – Chris Struve, Ascension – Presentation

- Originally, the subgroup explored a provision that would mirror CT language and exempt all 24/7 ED from initiation criteria and maintenance volumes. Both the subgroup and the workgroup felt that proposal too much potential impact given mobile routes and the workgroup went back to consider a more narrow provision based on the MRI modality use. Specially the subgroup looked at layering a provision for Trauma designation and stroke programs.
- Currently there are 13 Level 1 Trauma Centers, 25 Level 2 centers, 23 Level 3 centers and 43 level 4 centers.
- Currently there are 12 comprehensive stroke centers and 2 thrombectomy-capable stroke centers
- The subgroup without consensus recommends a provision that ensured at least one initial MRI would be available (without volume for a facility with either Level 1 or Level 2 or CSC/TSC Certified Stroke Program. That would be 39 facility for if the language proposed 'OR' and 13 is the provision required both trauma and CSC/TSC stroke.
- An unit initiated under this provision would continue to be subject to the project delivery requirements.
- Patrick O'Donovan, Beaumont Health has concerns over if this really an access issue and exempting a unit to be initiated without volume but holding them to the project delivery requirements.
- Abby Burnell, RWC Advocacy – I think we need to be asking if it is good policy to allow for this provision to protect our L 1&2 Trauma hospitals and stroke programs since access to MRI is required in that designation.
- Dr. Mukherji would like to see consensus from the group and asks that they meet again and in December provide the following: # of hospitals PSC and TSCs
- Draft language below was presented but no vote was taken:

Section 3. Requirements to initiate an MRI service

Sec. 3. An applicant proposing to initiate an MRI service or a host site shall demonstrate the following requirements, as applicable:

(1) An applicant proposing to initiate a fixed MRI service shall demonstrate 6,000 available MRI adjusted procedures per proposed fixed MRI unit from within the same planning area as the proposed service/unit.

(2) An applicant proposing to initiate a fixed MRI service that meets the following requirements shall not be required to be in compliance with subsection (1):

(a) A hospital proposing to initiate its first fixed MRI unit shall demonstrate all of the

following:

(i) The proposed site is a hospital licensed under Part 215 of the Code.

(ii) The hospital operates an emergency room that provides 24-hour emergency care services as authorized by the local medical control authority to receive ambulance runs.

(iii) The applicant hospital is designated as a Level I or II trauma facility by the American College of Surgeons and has been certified as a Comprehensive Stroke Center by The Joint Commission, the Accreditation Commission for Health Care, Inc, or Det Norske Veritas

Subgroup #4 (Charge 10) Dave Walker, Spectrum Health – Presentation

- The subgroup has been working hard via email to refine the language but met this week to review and approve the recommendation and language to be presented today.
- Portable units are a new technology but want to create an opportunity for their use in Michigan with a limited approach that is specific to the MRI modality.
- As written 20 facilities would qualify with 1 facility in a rural area.
- Current portable MRI is for head scans but best for neuro and stroke.
 - Dr. Mukherji what is the difference between brain and head. – Brain makes more sense. All agreed.
- To initiate hospitals would have to meet the following:
 - Operational MRI service for 36-months
 - Level 1 or 2 Trauma and a Comprehensive Stroke Center.
 - OR has in the most recent 12-months treated 500 acute stroke patients in a metro county and 300 acute stroke patients in a rural county.
- The hospital must agree to
 - Only use for brain or head scanning
 - Have an safety committee to oversee use
 - Report the utilization data annually to the Department
- Vikas Gulani, Michigan Medicine concerns that the unit scan are not adequate for diagnosis and could cause harm if facilities were using them regularly.
- Dr. Betz and Dr. Mukherji expressed its important to create a provision for the technology to be allowed under CON then hospitals can evaluate safety further refine use if they want.
- Department confirmed an applicant would still need to meet the 6,000 points to initiate a unit; this is just a special use exemption on a diagnostic unit.
- Subgroup recommends the following language to allow for limited scope now but also revisit the charge by reviewing utilization and FDA approved equipment in 3 years.
- Draft language below was unanimously approved by the subgroup.

Definition:

Section 2(1)(q) “hospital-based portable MRI” means an MRI unit that can be transported into patient care areas (e.g. dedicated neuroscience unit, ICU, Operating Room) to provide imaging of the brain.

Section 13. Requirements for all applicants proposing to initiate, replace, or acquire an FDA-approved hospital-based portable MRI unit

Sec. 13. An applicant proposing to initiate, expand, replace, or acquire an FDA-approved hospital-based portable MRI unit shall demonstrate that it meets all of the following:


- (1) An applicant is limited to the initiation, expansion, replacement, or acquisition of no more than two hospital-based portable MRI units.
- (2) The proposed site is a hospital licensed under Part 215 of the Code.
- (3) The proposed site has an existing fixed MRI service that has been operational for the previous 36 consecutive months and is meeting its minimum volume requirements.
- (4) The applicant hospital is designated as a Level I or II trauma facility by the American College of Surgeons and has been certified as a Comprehensive Stroke Center by The Joint Commission,

the Accreditation Commission for Health Care, Inc, or Det Norske Veritas or has cared for more than 500 acute stroke patients in the most recent 12-month period if located in a metropolitan county or 300 acute stroke patients in the most recent 12-month period if located in a rural or micropolitan county.

- (5) The applicant agrees to operate the FDA-approved hospital-based portable MRI unit in accordance with all applicable project delivery requirements set forth in Section 14 of these standards.
- (6) The approved FDA-approved hospital-based portable MRI unit will not be subject to MRI volume requirements.
- (7) The applicant may not utilize MRI procedures performed on an FDA-approved hospital-based portable MRI unit to demonstrate need or to satisfy MRI CON review standards requirements.

Section 14. Project delivery requirements – terms of approval

- (7) An applicant approved under Section 13 shall be in compliance with the following:
 - (a) The FDA-approved hospital-based portable MRI unit can only be used by a qualifying program for brain scanning of patients being treated in a dedicated neuroscience unit, an adult or pediatric Intensive Care Unit (ICU) and/or an operating room.
 - (b) The approved applicant must have an institutional MRI safety committee.
 - (c) The approved applicant must provide annual reports to the Department by April 30th of each year for the preceding calendar year, which include at least all of the following visits performed on the FDA-approved hospital-based portable MRI unit.
 - (d) The following portable MRI data must be reported to the Department:
 - (i) Number of adult visits (age \geq 18)
 - (ii) Number of pediatric visits (age $<$ 18)
 - (iii) Number of visits performed in an ICU
 - (iv) Number of visits performed in a dedicated neuroscience unit
 - (v) Number of visits performed in an operating room



MRI Subgroup #1 – Update November 18, 2021



Review of Subgroup #1 Charges

#1 - Review all volume requirements for fixed and mobile MRI

#4 - Review the current equivalent weighting for patient sedation/general anesthesia in Section 15(1)(a)

#9 - Review the addition of a mobile service to a fixed site without physician commitment letters

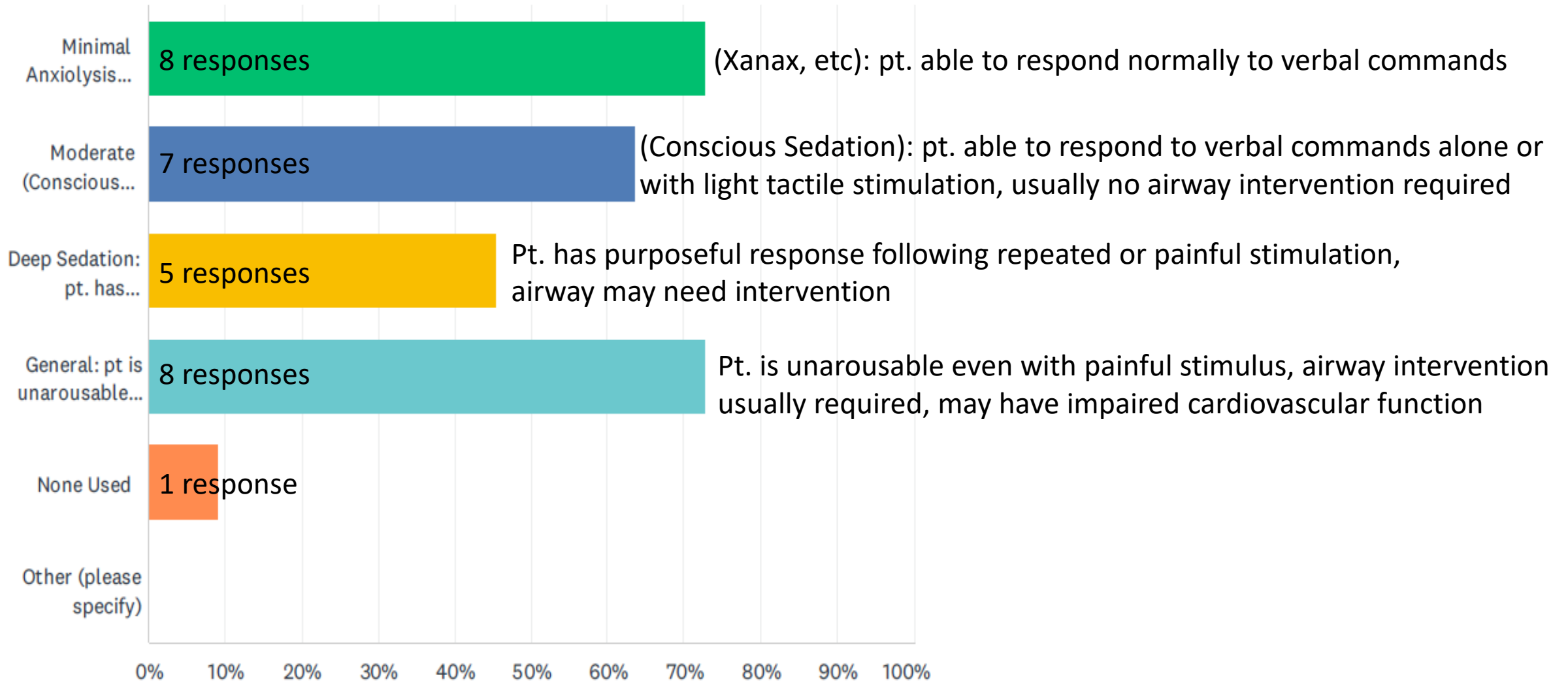
Charge #1 – Review Volume Requirements

- Meeting #3:
 - Now that we have agreed on sedation weights (charge #4)
 - Next step - calculate volume impact
 - Commitment to send out proposed language prior to next meeting
- Next meeting:
 - Review and Approve Volume Proposals for Fixed
 - Review and Approve Volume Proposals for Mobile

Charge #4 – Sedation/Anesthesia Weights

- Meeting #3:
 - Reviewed Survey results
 - Received subgroup's approval of additional weights to be added to standards for deep sedation and general anesthesia of 1.5
 - Maintain 0.75 weight for conscious sedation
 - Subgroup approved proposed language
- Next Steps:
 - Informal Workgroup Approval of Language

Q1 Do you use any of the following sedation levels:(check all that apply)



Charge #4 - Draft Language Proposal

➤ Section 15. MRI Procedure Adjustments - **CURRENT**

➤ Sec. 15(1)

- (d) For each MRI procedure performed on a sedated patient, 0.75 shall be added to the base value
- (e) For each MRI procedure performed on a re-sedated patient, 0.25 shall be added to the base

➤ Section 15. MRI Procedure Adjustments - **PROPOSED**

➤ Sec. 15(1)

- (d) For each MRI procedure performed on a sedated patient, 0.75 shall be added to the base value for conscious sedation and 1.5 shall be added to the base value for general anesthesia or deep sedation as defined by the American Society of Anesthesiologists
- (e) For each MRI procedure performed on a re-sedated patient, 0.25 shall be added to the base

Charge #9 – Physician Commitments for Mobile Svc

- Meeting #3:
 - Discussed issues surrounding physician commitments and if should be necessary to be granted mobile MRI approval. Discussed guardrails that should be included in the standards.
 - Commitment to send out proposed language prior to next meeting
- Next Meeting:
 - Review and Approve Language

Questions?

Proposed Language for Charge 4: Review the current equivalent weighting for patient sedation/general anesthesia in Section 15(1)(a)

Section 2. Definitions

(qq) "Sedated patient" means a patient that meets all of the following:

(i) whose level of consciousness is either conscious-sedation or a higher level of sedation, as defined by the American Association ~~Association~~ **Society** of Anesthesiologists, the American Academy of Pediatrics, the Joint Commission on the Accreditation of Health Care Organizations, or an equivalent definition.

(ii) who is monitored by mechanical devices while in the magnet.

(iii) who requires observation while in the magnet by personnel, other than employees routinely assigned to the MRI unit, who are trained in cardiopulmonary resuscitation (CPR).

Section 15. MRI procedure adjustments

Sec. 15. (1) The Department shall apply the following formula, as applicable, to determine the number of MRI adjusted procedures that are performed by an existing MRI service or unit:

(a) The base value for each MRI procedure is 1.0. For functional MRI (fMRI) procedures, MRI-guided interventions, and cardiac MRI procedures, the base value is 2.0.

(i) fMRI means brain activation studies.

(ii) MRI-guided interventions means any invasive procedure performed requiring MRI guidance performed in the MRI scanner.

(iii) Cardiac MRI Procedure means dedicated MRI performed of the heart done for the sole purpose of evaluation of cardiac function, physiology, or viability.

(b) For each MRI visit involving a pediatric patient, 0.25 shall be added to the base value.

(c) For each MRI visit involving an inpatient, 0.50 shall be added to the base value.

(d) For each MRI procedure performed on a sedated patient, 0.75 shall be added to the base value **for conscious sedation and 1.5 shall be added to the base value for general anesthesia or deep sedation as defined by the American Society of Anesthesiologists.**

MRI Subgroup #3

Michigan Trauma Programs

Michigan Trauma Program (MRI Status)

| Trauma Facility Name | Location | Trauma Level - Adult | Trauma Level - Pediatric | MRI |
|---|------------------|----------------------|--------------------------|-----|
| Ascension St. John Hospital | Detroit | Level I | Level II | YES |
| Beaumont Hospital – Royal Oak | Royal Oak | Level I | Level II | YES |
| Bronson Methodist Hospital | Kalamazoo | Level I | | YES |
| Detroit Receiving Hospital | Detroit | Level I | | YES |
| Henry Ford Hospital | Detroit | Level I | | YES |
| Hurley Medical Center | Flint | Level I | Level II | YES |
| Sparrow Hospital | Lansing | Level I | | YES |
| Spectrum Health Buttenworth | Grand Rapids | Level I | | YES |
| St. Joseph Mercy Hospital | Ann Arbor | Level I | | YES |
| University Hospital – Michigan Medicine | Ann Arbor | Level I | | YES |
| Ascension Borgess Hospital | Kalamazoo | Level II | | NO |
| Ascension Genesys Hospital | Grand Blanc | Level II | | YES |
| Ascension Providence Hospital – Novi | Novi | Level II | | YES |
| Ascension Providence Hospital – Southfield | Southfield | Level II | | YES |
| Ascension St. Mary's of Michigan | Saginaw | Level II | | YES |
| Beaumont Hospital – Dearborn | Dearborn | Level II | | YES |
| Beaumont Hospital – Farmington Hills | Farmington Hills | Level II | | YES |
| Beaumont Hospital – Trenton | Trenton | Level II | | YES |
| Beaumont Hospital – Troy | Troy | Level II | | YES |
| Covenant Healthcare | Saginaw | Level II | Level II | YES |
| Henry Ford Allegiance Health | Jackson | Level II | | YES |
| Henry Ford Macomb Hospital | Clinton Township | Level II | | YES |
| McLaren Lapeer Region | Lapeer | Level II | | YES |
| McLaren Macomb Hospital | Mt. Clemens | Level II | | YES |
| McLaren Northern Michigan | Petoskey | Level II | | YES |
| McLaren Oakland | Pontiac | Level II | | YES |
| Mercy Health Mercy Campus | Muskegon | Level II | | YES |
| Mercy Health Saint Mary's | Grand Rapids | Level II | | YES |
| Metro Health: University of Michigan Health | Wyoming | Level II | | YES |
| MidMichigan Medical Center | Midland | Level II | | YES |
| Munson Healthcare | Traverse City | Level II | | YES |
| Sinai-Grace Hospital | Detroit | Level II | | YES |
| St. Joseph Mercy Oakland | Pontiac | Level II | | YES |
| St. Mary Mercy Hospital | Livonia | Level II | | YES |
| UP Health System – Marquette | Marquette | Level II | | YES |

| Trauma Facility Name | Location | Trauma Level - Adult | Trauma Level - Pediatric | MRI |
|--|-----------------|----------------------|--------------------------|-----|
| Ascension Macomb-Oakland Hospital | Warren | Level III | | YES |
| Ascension Providence Rochester Hospital | Rochester | Level III | | YES |
| Aspirus Keweenaw Hospital | Laurium | Level III | | YES |
| Beaumont Hospital – Grosse Pointe | Grosse Pointe | Level III | | YES |
| Beaumont Hospital – Wayne | Wayne | Level III | | YES |
| Bronson Battle Creek | Battle Creek | Level III | | YES |
| Henry Ford West Bloomfield | West Bloomfield | Level III | | YES |
| Henry Ford Wyandotte Hospital | Wyandotte | Level III | | YES |
| Holland Hospital | Holland | Level III | | YES |
| Lake Huron Medical Center | Port Huron | Level III | | YES |
| McLaren Bay Region | Bay City | Level III | | YES |
| McLaren Flint | Flint | Level III | | YES |
| McLaren Greater Lansing | Lansing | Level III | | YES |
| McLaren Port Huron | Port Huron | Level III | | YES |
| MidMichigan Medical Center – Alpena | Alpena | Level III | | YES |
| MidMichigan Medical Center – Gratiot | Alma | Level III | | YES |
| Oaklawn Hospital | Marshall | Level III | | YES |
| ProMedica Monroe Regional Hospital | Monroe | Level III | | YES |
| Spectrum Health Blodgett | Grand Rapids | Level III | | YES |
| Spectrum Health Lakeland – St. Joseph | St. Joseph | Level III | | YES |
| Spectrum Health Zeeland Community Hospital | Zeeland | Level III | | YES |
| UP Health System – Portage | Hancock | Level III | | YES |
| War Memorial Hospital | Sault St. Marie | Level III | | YES |
| Allegan General Hospital | Allegan | Level IV | | YES |
| Ascension Macomb-Oakland Hospital; Madison Heights | Madison Heights | Level IV | | YES |
| Ascension River District Hospital | East China | Level IV | | YES |
| Ascension St. Joseph Hospital | Tawas City | Level IV | | YES |
| Ascension Standish Hospital | Standish | Level IV | | YES |
| Aspirus Iron River Hospital and Clinics | Iron River | Level IV | | NO |
| Aspirus Ironwood Hospital | Ironwood | Level IV | | YES |
| Aspirus Ontonagon Hospital | Ontonagon | Level IV | | YES |
| Baraga County Memorial Hospital | L'Anse | Level IV | | YES |
| Beaumont Hospital – Taylor | Taylor | Level IV | | YES |
| Bronson Lakeview Hospital | Paw Paw | Level IV | | YES |
| Bronson South Haven Hospital | South Haven | Level IV | | YES |
| Deckerville Community Hospital | Deckerville | Level IV | | YES |
| Eaton Rapids Medical Center | Eaton Rapids | Level IV | | YES |
| Harbor Beach Community Hospital | Harbor Beach | Level IV | | YES |
| Helen Newberry Joy Hospital | Newberry | Level IV | | YES |
| Hills and Dales General Hospital | Cass City | Level IV | | NO |
| Kalkaska Memorial Health Center | Kalkaska | Level IV | | YES |
| Lakeland Hospital – Watervliet | Watervliet | Level IV | | YES |
| Marlette Regional Hospital | Marlette | Level IV | | YES |
| McKenzie Health System | Sandusky | Level IV | | YES |

| Trauma Facility Name | Location | Trauma Level - Adult | Trauma Level - Pediatric | MRI |
|---|--------------|----------------------|--------------------------|-----|
| McLaren Caro Region | Caro | Level IV | | NO |
| Mercy Health Lakeshore Campus | Shelby | Level IV | | YES |
| MidMichigan Medical Center – Clare | Clare | Level IV | | YES |
| Munson Healthcare Cadillac Hospital | Cadillac | Level IV | | YES |
| Munson Healthcare Charlevoix Hospital | Charlevoix | Level IV | | YES |
| Munson Healthcare Grayling Hospital | Grayling | Level IV | | YES |
| North Ottawa Community Hospital | Grand Haven | Level IV | | YES |
| OSF Healthcare St. Francis Hospital and Medical Group | Escanaba | Level IV | | YES |
| Otsego Memorial Hospital | Gaylord | Level IV | | YES |
| Paul Oliver Memorial Hospital | Frankfort | Level IV | | YES |
| Scheurer Hospital | Pigeon | Level IV | | YES |
| Sparrow Carson Hospital | Carson | Level IV | | YES |
| Sparrow Clinton Hospital | St. Johns | Level IV | | YES |
| Sparrow Ionia Hospital | Ionia | Level IV | | YES |
| Spectrum Health Big Rapids Hospital | Big Rapids | Level IV | | YES |
| Spectrum Health Gerber Memorial Hospital | Fremont | Level IV | | YES |
| Spectrum Health Kelsey Hospital | Lakeview | Level IV | | YES |
| Spectrum Health Lakeland – Niles | Niles | Level IV | | YES |
| Spectrum Health Ludington Hospital | Ludington | Level IV | | YES |
| Spectrum Health Pennock Hospital | Hastings | Level IV | | YES |
| Spectrum Health Reed City Hospital | Reed City | Level IV | | YES |
| Spectrum Health United Hospital | Greenville | Level IV | | YES |
| C.S. Mott Children's Hospital | Ann Arbor | | Level I | YES |
| Children's Hospital of Michigan | Detroit | | Level I | YES |
| Helen DeVos Children's Hospital | Grand Rapids | | Level I | YES |

13 Level 1 Trauma Centers
25 Level 2 Trauma Centers
23 Level 3 Trauma Centers
43 Level 4 Trauma Centers

Michigan Stroke Programs

JCAHO Standards for Stroke Certification

The Joint Commission Stroke Certification Programs – Program Concept Comparison

| Program Concept | ASRH | PSC | TSC | CSC |
|---|--|--|--|--|
| Stroke Unit | No designated beds for acute care of stroke patients | Stroke unit or designated beds for the acute care of stroke patients | Has a neurointensive care unit or designated intensive care beds for complex stroke patients available 24/7; on-site critical care coverage 24/7 | Has a neurointensive care unit or designated intensive care beds for complex stroke patients available 24/7; on-site neurointensivist coverage 24/7 |
| Initial Assessment of Patient | Emergency Department physician, nurse practitioner, or physician assistant | Emergency Department physician | Emergency Department physician | Emergency Department physician |
| Diagnostic Testing Capability | CT, labs 24/7 (MRI 24/7 if used) | CT, MRI (if used), labs 24/7; CTA and MRA (to guide treatment decisions), at least one modality for cardiac imaging when necessary | CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE as indicated | CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE, TTE as indicated |
| Neurologist Accessibility | 24/7 via in person or telemedicine | 24/7 via in person or telemedicine | 24/7 via in person or telemedicine; written call schedule for attending physicians providing availability 24/7 | Meets concurrently emergent needs of multiple complex stroke patients; Written call schedule for attending physicians providing availability 24/7 |
| Neurosurgical Services | Within 3 hours (provided through transferring the patient) | Within 2 hours; OR is available 24/7 in PSCs providing neurosurgical services | Within 2 hours; OR is available 24/7 in TSCs providing neurosurgical services | 24/7 availability: Neurointerventionist; Neuroradiologist; Neurologist; Neurosurgeon |
| Telemedicine | Within 20 minutes of it being necessary | Available if necessary | Available if necessary | Available if necessary |
| Treatment Capabilities | IV thrombolytics; Anticipate transfer of patients who have received IV thrombolytics | IV thrombolytics and medical management of stroke | IV thrombolytics; Mechanical thrombectomy, IA thrombolytics | IV thrombolytics; Endovascular therapy; Microsurgical neurovascular clipping of aneurysms; Neuroendovascular coiling of aneurysms; Stenting of extracranial carotid arteries; Carotid endarterectomy |
| Transfer protocols | With one PSC, TSC, or CSC | For neurosurgical emergencies | For neurosurgical emergencies | For receiving transfers and circumstances for not accepting transferred patients |
| Staff Stroke Education Requirements | ED staff – a minimum of twice a year; core stroke team at least 4 hours annually | ED staff – a minimum of twice a year; core stroke team at least 8 hours annually | Nurses and other ED staff – 2 hours annually; Stroke nurses and core stroke team – 8 hours annually | Nurses and other ED staff - 2 hours annually; Stroke nurses and core stroke team - 8 hours annually |
| Provision of Educational Opportunities | Provides educational opportunities to prehospital personnel | Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public | Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public | Sponsors at least 2 public educational opportunities annually; LIPs and staff present 2 or more educational courses annually for internal staff or individuals external to the comprehensive stroke center (e.g., referring hospitals) |

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MDHHS Stroke Programs

| # | Michigan Stroke Hospitals | Certification Status |
|----|--|----------------------|
| 1 | Ascension Borgess Hospital | CSC |
| 2 | Ascension Genesys Hospital * | PCS |
| 3 | Ascension Macomb-Oakland, Warren Campus | PSC |
| 4 | Ascension St Mary's Hospital | CSC |
| 5 | Ascension St. John Hospital | CSC |
| 6 | Ascension Providence Hospital, Novi Campus | CSC |
| 7 | Ascension Providence Rochester Hospital | PSC |
| 8 | Ascension Providence Hospital, Southfield Campus | PSC |
| 9 | Aspirus Iron River Hospital | |
| 10 | Aspirus Ironwood Hospital | |
| 11 | Aspirus Keweenaw Hospital | |
| 12 | Aspirus Ontonagon Hospital | |
| 13 | Bronson Methodist Hospital | CSC |
| 14 | Covenant Health Care System | PSC |
| 15 | Deckerville Community Hospital | |
| 16 | Detroit Receiving Hospital | PSC |
| 17 | Henry Ford Detroit Hospital* | CSC |
| 18 | Henry Ford Macomb Hospital | PSC |
| 19 | Henry Ford West Bloomfield Hospital | PSC/TSC |
| 20 | Henry Ford Wyandotte Hospital | PSC |
| 21 | Hurley Medical Center | PSC |
| 22 | Huron Valley-Sinai Hospital | PSC |
| 23 | Marlette Regional Hospital | |
| 24 | McKenzie Health System | ASRH |
| 25 | McLaren Bay Hospital | PCS |
| 26 | McLaren Flint Hospital * | CSC |
| 27 | McLaren Greater Lansing Hospital | PSC |
| 28 | McLaren Lapeer Region Hospital | PSC |
| 29 | McLaren Macomb Hospital | PSC |

| | | |
|----|--------------------------------------|-----|
| 30 | McLaren Northern Michigan Hospital * | PSC |
| 31 | McLaren Oakland Medical Ctr. | PSC |
| 32 | McLaren Port Huron Hospital | PSC |
| 33 | Mercy Health Muskegon Hospital | PSC |
| 34 | Mercy Health Saint Mary's Hospital | CSC |
| 35 | Metro Health Hospital-Grand Rapids | PSC |
| 36 | Michigan Medicine Hospital | CSC |
| 37 | Munson Medical Center * | PSC |
| 38 | Oaklawn Hospital | |
| 39 | ProMedica Bixby Hospital | PSC |
| 40 | ProMedica Herrick Hospital | PSC |
| 41 | ProMedica Monroe Regional Hospital | PSC |
| 42 | Sparrow Hospital * | CSC |
| 43 | Spectrum Lakeland Health* | PSC |
| 44 | Spectrum Health Blodgett | PSC |
| 45 | Spectrum Health Butterworth | CSC |
| 46 | St. Joseph Mercy Hospital-Ann Arbor | TSC |
| 47 | St. Joseph Mercy Hospital-Chelsea | PSC |

| | | |
|----|-----------------------------------|----------|
| 48 | St. Joseph Mercy Hospital-Oakland | TSC, PSC |
| 49 | St. Mary Mercy Hospital - Livonia | PSC |

PSC = [Primary Stroke Center](#)

CSC = [Comprehensive Stroke Center](#)

TSC = [Thrombectomy-Capable Stroke Center](#)

12 Comprehensive Stroke Centers (CSC)
2 Thrombectomy-Capable Stroke Centers (TSC)

Note: Beaumont Royal Oak not on this list but is a confirmed CSC

Recommendation

- The subgroup craft a provision that ensures at least one initial MRI would be available (without volume requirements) for a facility with either a Level 2 (or higher) Trauma Center **or** a CSC/TSC Certified Stroke Program
- This would be 39 facilities if either program qualified a facility and 13 facilities if it required both programs in order to qualify
- Rationale is that these programs require 24/7 access to an MRI and that CON should never be a barrier to accredited clinical programs
 - Outside accreditation should limit concerns about MRI being clinically appropriate
- Recommend that a party initiating under this provision would have to comply with project delivery requirements (e.g. would have to meet minimum volume requirements after two years)



PORTABLE MRI UNITS

SUBGROUP #4

RECOMMENDATION

PARTICIPANTS

- Dave Walker, Spectrum Health
- Dr. Brad Betz, Spectrum Health
- Emily Vocke, Henry Ford Health System
- Arlene Elliot, Arbor Advisors
- Jennifer Groseclose, Munson Healthcare
- Cheryl Martin, Henry Ford Health System
- Marlena Hendershot, Sparrow
- Patrick O'Donovan, Beaumont Health
- Scott Bowers, St. Joseph Mercy Ann Arbor and Livingston
- Steve Szelag, Michigan Health
- Abby Burnell, RWC Advocacy

WHAT?

- Portable MRI technology is in its infancy. As such, it may not “be ready for primetime” and the subgroup recommends a limited initial approach to widespread application.
- Proliferation at this stage may result in unnecessary expenditure and poor quality of care.
- As written, this recommendation would allow 20 facilities to obtain a CON for a portable MRI unit.
- We suspect that the technology will be self-limiting due to capital and quality of images.
- Current approved MRI only capable of head scans and is best suited for neurological and stroke care.

KEY POINTS



Definition

- Section 2(1)(q) “hospital-based portable MRI” means an MRI unit that can be transported into patient care areas (e.g. dedicated neuroscience unit, ICU, Operating Room) to provide imaging of the brain.



Initiation Requirements

- Hospitals with an existing fixed MRI service, which has been in operation for 36 months
- Hospitals that are designated as a Level I or II trauma facility and as a comprehensive stroke center (CSC)
- Alternatively, hospitals can forgo the level I or II trauma and CSC certification if it has care for more than 500 acute stroke patients in the most recent 12-month period if located in a metropolitan county or 300 acute stroke patients in the most recent 12-month period if located in a rural or micropolitan county



Project Delivery Requirements

- Only use for brain scanning of patients being treated in a dedicated neuroscience unit, an adult or pediatric Intensive Care Unit (ICU) and/or an operating room
- Have an institutional MRI safety committee
- Report data to the Department on an annual basis (Annual Survey)

LANGUAGE

Section 13. Requirements for all applicants proposing to initiate, replace, or acquire an FDA-approved hospital-based portable MRI unit

Sec. 13. An applicant proposing to initiate, expand, replace, or acquire an FDA-approved hospital-based portable MRI unit shall demonstrate that it meets all of the following:

- (1) An applicant is limited to the initiation, expansion, replacement, or acquisition of no more than two hospital-based portable MRI units.
- (2) The proposed site is a hospital licensed under Part 215 of the Code.
- (3) The proposed site has an existing fixed MRI service that has been operational for the previous 36 consecutive months and is meeting its minimum volume requirements.
- (4) The applicant hospital is designated as a Level I or II trauma facility by the American College of Surgeons and has been certified as a Comprehensive Stroke Center by The Joint Commission, the Accreditation Commission for Health Care, Inc, or Det Norske Veritas or has cared for more than 500 acute stroke patients in the most recent 12-month period if located in a metropolitan county or 300 acute stroke patients in the most recent 12-month period if located in a rural or micropolitan county.
- (5) The applicant agrees to operate the FDA-approved hospital-based portable MRI unit in accordance with all applicable project delivery requirements set forth in Section 14 of these standards.
- (6) The approved FDA-approved hospital-based portable MRI unit will not be subject to MRI volume requirements.
- (7) The applicant may not utilize MRI procedures performed on an FDA-approved hospital-based portable MRI unit to demonstrate need or to satisfy MRI CON review standards requirements.

LANGUAGE

Section 14. Project delivery requirements – terms of approval

(7) An applicant approved under Section 13 shall be in compliance with the following:

- (a) The FDA-approved hospital-based portable MRI unit can only be used by a qualifying program for brain scanning of patients being treated in a dedicated neuroscience unit, an adult or pediatric Intensive Care Unit (ICU) and/or an operating room.
- (b) The approved applicant must have an institutional MRI safety committee.
- (c) The approved applicant must provide annual reports to the Department by April 30th of each year for the preceding calendar year, which include at least all of the following visits performed on the FDA-approved hospital-based portable MRI unit.
- (d) The following portable MRI data must be reported to the Department:
 - (i) Number of adult visits (age \geq 18)
 - (ii) Number of pediatric visits (age $<$ 18)
 - (iii) Number of visits performed in an ICU
 - (iv) Number of visits performed in a dedicated neuroscience unit
 - (v) Number of visits performed in an operating room

ADDITIONAL RECOMMENDATION

- Review utilization and in three years determine if the language needs to be reviewed and modified to allow for more expansive utilization.

THANK YOU

Questions? Comments?

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